Mastering Ansible

Jenkins Ansible Configuration

accenture

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Exercise Steps

*Scenario***:**

In this activity, participants will be establishing ***SSH*** connection between Controller Node and Worker Node using Jenkins user.

Walkthrough:

1. Verify Jenkins service status
2. Establishing communication between Controller Node and Worker Node using Jenkins user

| 1 | Follow the below steps to verify Ansible Installation.<br><br>Switch to root user<br><br>**sudo su –**<br><br>**systemctl status jenkins**<br><br>```
[user1@ip-172-32-13-19 ~]$ sudo su -
Last login: Fri Jun  3 06:14:35 UTC 2022 on pts/0
[root@ip-172-32-13-19 ~]# systemctl status jenkins
● jenkins.service - Jenkins Continuous Integration Server
   Loaded: loaded (/usr/lib/systemd/system/jenkins.service; enabled; vendor preset: disab
   Active: active (running) since Fri 2022-06-03 06:25:07 UTC; 3h 54min ago
 Main PID: 1166 (java)
    Tasks: 38
   Memory: 1.1G
   CGroup: /system.slice/jenkins.service
           └─1166 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java...
``` |

1.1.1.1   **Part 2 :** Establishing communication between Controller Node and Worker Node using Jenkins user

Step 1	Switch to Jenkins user on Controller Node using below command **su -s /bin/bash jenkins**
Step 2	On Controller node, execute the below command to generate ssh key for establishing the ssh connection between controller and worker nodes – **ssh-keygen**

```
bash-4.2$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/var/lib/jenkins/.ssh/id_rsa):
/var/lib/jenkins/.ssh/id_rsa already exists.
Overwrite (y/n)? y
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /var/lib/jenkins/.ssh/id_rsa.
Your public key has been saved in /var/lib/jenkins/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:XimKO43Oef8vFy/AP8S6/bP3tI6jWohvCNcBGsUzrLQ jenkins@ip-172-32-13-19.ap-south-1.compute.internal
The key's randomart image is:
+---[RSA 2048]----+
|      +.          |
|     o *          |
|    . = +         |
|   E   . .        |
|      S.+.        |
|     o +.++ +     |
|    .o+.o. * o  . |
|   .ooo...+.=.+.o |
|    .=o .o++*+==*o|
+----[SHA256]-----+
bash-4.2$
```

Execute the below command and copy the content of **~/.ssh/id_rsa.pub** file

cat ~/.ssh/id_rsa.pub

Step 3	On the Worker node execute the below command using root user and paste the content you have copied in the above step **cat >> ~/.ssh/authorized_keys** Right click on the command line and paste the content. Finally press ctrl + d to exit from cat line editor
Step 4	To confirm if worker node could connect from controller node from Jenkins user through SSH, execute the below command – **ssh root@<ip-address-of-worker-node>** **exit**

Step 5	Execute the below command using Jenkins user to test if we can connect to worker nodes with ansible ad-hoc command –
	
	ansible -m ping target
	
	The output is as shown below –
	
	![terminal output]
	<pre>bash-4.2$ ansible -m ping target
	[WARNING]: log file at /var/log/ansible.log is not writeable and we cannot create it, aborting
	
	172.32.5.219
		SUCCESS => {
		    "ansible_facts": {
		        "discovered_interpreter_python": "/usr/bin/python"
		    },
		    "changed": false,
		    "ping": "pong"
		}
		bash-4.2$ id
		uid=986(jenkins) gid=979(jenkins) groups=979(jenkins) context=system_u:system_r:unconfined_service_t:s0
		bash-4.2$</pre>

*** End of Activity Jenkin Ansible Configuration ***